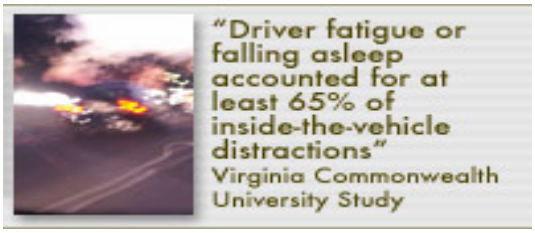
Drowsiness and driving do not mix

The National Sleep Foundation has launched a new Web site providing the latest information and resources on drowsy driving, a common though often ignored problem that results in thousands of injuries and deaths each year. "Sleepiness has no place on the road. Yet crashes caused by a driver who was drowsy or actually fell asleep behind the wheel occur almost daily in this country and in countries around the world," notes Richard L. Gelula, NSF's executive director.



According to NSF's annual Sleep in America polls, about **one-half of adult drivers --** some **100 million people --** say they **have driven while feeling drowsy.** Seventeen percent, about **32** million people, say they **have fallen asleep at the wheel.** The National Highway Traffic Safety Administration conservatively estimates that **100,000 police-reported accidents are the direct result of driver fatigue each year, resulting in an estimated 1,550 deaths, 71,000 injuries and $12.5 billion in monetary losses, including diminished productivity and property loss.**

College Students, Military Drivers at Risk

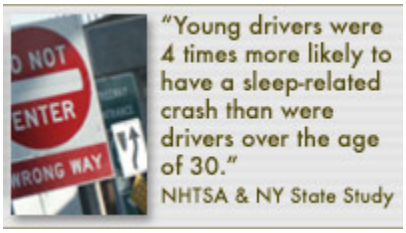
Do you have a family member or friend driving home for the holidays from college or a military or work assignment? Perhaps you are a faculty member or a supervisor who is responsible for and concerned about the health and safety of others.

Young **drivers under age 30** have the greatest risk for auto crashes and fatalities due to falling asleep at the wheel. This may be caused as much by the biology of sleep for young adults as by sleep deprivation, untreated sleep disorders and circadian rhythms. Particularly at risk are those who have stayed up long hours sacrificing sleep to complete work and other tasks because they are anxious to "hit the road" and get home.

If your friends or loved ones are driving, advise them to get a good night's sleep before getting on the road and avoid driving overnight or when they would normally be sleeping**. At the very first sign of sleepiness**, they **should pull off**

the road at a safe area and use effective counter-measures such as switching to an alert driver, napping and having a caffeinated beverage or snack.

Recent research has shown that a person who has been awake for 18 consecutive hours has the same impairment to judgment and reaction time as an adult with a blood alcohol level of .05. A person who has been awake for 24 hours has a blood alcohol equivalent of .10, legally drunk in every state. Medical research has also shown that America's growing sleeplessness is a major threat to public health. Whether caused by lifestyle choices, workplace scheduling or untreated sleep disorders, inadequate sleep over time is linked to increased risk of heart attack, stroke, depression, obesity and diabetes. Inadequate sleep also complicates the treatment of these and many other chronic medical conditions. When inadequate sleep is combined with driving, the result can be fatal, not only for the driver, but anyone else on the road. Definitions of drowsy driving or driver fatigue rely on how the concept of "fatigue" is defined. Fatigue is a general term commonly used to describe the experience of being "sleepy," "tired," "drowsy," or "exhausted." While all of these terms have different meanings in research and clinical settings, they tend to be used interchangeably in the traffic safety and transportation fields.

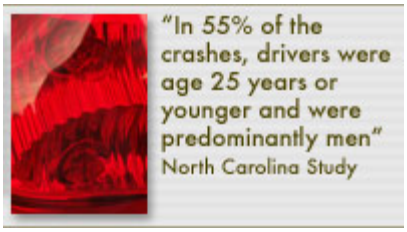


There are many underlying causes of sleepiness, fatigue and drowsy driving. Including sleep loss from restriction or too little sleep, interruption or fragmented sleep; chronic sleep debt; circadian factors associated with driving patterns or work schedules; undiagnosed or untreated sleep disorders; time spent on a task; the use of sedating medications; and the consumption of alcohol when already tired. These factors have cumulative effects and a combination of any of these can greatly increase one's risk for a fatigue-related crash.

Who is at risk?

- Sleep related crashes are most common in young people, especially men, adults with children and shift workers.
- Adults between 18-29 are much more likely to drive while drowsy compared to other age groups
- Men are more likely than women to drive while drowsy and are almost twice as likely as women to fall asleep while driving.
- Adults with children in the household are more likely to drive drowsy than those without children.
- Shift workers are more likely than those who work a regular daytime schedule to drive to or from work drowsy at least a few days a month.
- Sleep deprivation increases the risk of a sleep-related crash; the less people sleep, the greater the risk.
- According to a study by the AAA Foundation for Traffic Safety, people who sleep six to seven hours a night are twice as likely to be involved in such a crash as those sleeping 8 hours or more, while people sleeping less than 5 hours increased their risk four to five times.

- Other research indicates commercial drivers and people with undiagnosed sleep disorders such as sleep apnea and acute insomnia are also at greater risk for fall asleep crashes.
- Nearly three-quarters of adults in America (71%) drive a car to and from work, and many are drowsy drivers.



Questions to ask before hitting the road

Are you:

- Sleep-deprived or fatigued (6 hours of sleep or less triples your risk)
- Suffering from sleep loss (insomnia), poor quality sleep, or a sleep debt
- Driving long distances without proper rest breaks
- Driving through the night, midafternoon or when you would normally be asleep
- Taking sedating medications (antidepressants, cold tablets, antihistamines)
- Working more than 60 hours a week (increases your risk by 40%)
- Working more than one job and your main job involves shift work
- Drinking even small amounts of alcohol
- Driving alone or on a long, rural, dark or boring road

Countermeasures

Naps
Take a 15 to 20-minute nap-more than 20 minutes can make you groggy for at least 15 minutes after awakening

Caffeine
Consume the equivalent of 2 cups of coffee (see our caffeine calculator). http://www.drowsydriving.org/drive_alert/caff_calc.cfm Caffeine is available in various manners (soft drinks, energy drinks, coffee, tea, chewing gum, tablets) and amounts; remember, caffeine takes about 30 minutes to enter the blood stream and will not greatly affect those who regularly consume it. For Best Results: Try taking caffeine and then a short nap to get the benefits of both.

Sleep IQ Test

Think you're a sleep genius? In a 1999 nationwide survey, 83% of adult Americans failed the NSF Sleep IQ Test. The average person gave fewer than 6 correct responses. Find out your sleep IQ by following the instructions below.

Select your answers by clicking in a circle for statements 1 thru 12. Then, click on "What's My Sleep IQ?" to check your score and find out more about sleep. You can also check each response as you go by clicking on the hyperlinked "Answer" after each statement.*

True	False	
○	○	1. During sleep, your brain rests.
○	○	2. You cannot learn to function normally with one or two fewer hours of sleep a night than you need.
○	○	3. Boredom makes you feel sleepy, even if you have had enough sleep.
○	○	4. Resting in bed with your eyes closed cannot satisfy your body's need for sleep.
○	○	5. Snoring is not harmful as long as it doesn't disturb others or wake you up.
○	○	6. Everyone dreams every night.
○	○	7. The older you get, the fewer hours of sleep you need.
○	○	8. Most people don't know when they are sleepy.
○	○	9. Raising the volume of your radio will help you stay awake while driving.
○	○	10. Sleep disorders are mainly due to worry or psychological problems.
○	○	11. The human body never adjusts to night shift work.
○	○	12. Most sleep disorders go away even without treatment.

Sleep IQ Answers

1. *During sleep, your brain rests.*

False. While your body rests, your brain doesn't. An active brain during sleep prepares us for alertness and peak functioning the next day.

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2. *You cannot learn to function normally with one or two fewer hours of sleep a night than you need.*

True. Sleep need is biological. While children need more sleep than adults, how much sleep any individual needs is genetically determined. Most adults need eight hours of sleep to function at their best. How to determine what you need? Sleep until you wake on your own...without an alarm clock. Feel rested? That's your sleep need. You can teach yourself to sleep less, but not to need less sleep.

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3. *Boredom makes you feel sleepy, even if you have had enough sleep.*

False. When people are active, they usually don't feel sleepy. When they take a break from activity, or feel bored, they may notice that they are sleepy. However, what causes sleepiness most is sleep loss: not getting the sleep you need. Adults who don't get enough good sleep feel sleepy when they're bored. Boredom, like a warm or dark room, doesn't cause sleepiness, it merely unmasks it.

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4. *Resting in bed with your eyes closed cannot satisfy your body's need for sleep.*

True. Sleep is as necessary to health as food and water, and rest is no substitute for sleep. As noted above, sleep is an active process needed for health and alertness. When you don't get the sleep you need, your body builds up a sleep debt. Sooner or later, this debt must be paid...with sleep. If you drive when you're sleepy, you place yourself and others at risk because drowsy drivers can fall asleep at the wheel with little or no warning. Sleepiness contributes to driver inattention, which is related to one million crashes each year!

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5. *Snoring is not harmful as long as it doesn't disturb others or wake you up.*

False. Snoring may indicate the presence of a life-threatening sleep disorder called sleep apnea. People with sleep apnea snore loudly and arouse repeatedly during the night, gasping for breath. These repeated awakenings lead to severe daytime sleepiness, which raises the risk for accidents and heart problems. Yet 95% of those with sleep apnea remain unaware that they have a serious disorder. The good news: With treatment, patients can improve their sleep and alertness, and reduce their risk for accidents and health problems. Physicians and sleep specialists should be consulted.

Breathe easier, with info on sleep apnea.

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6. *Everyone dreams every night.*

True. Though many people fail to remember their dreams, dreaming does occur for every person, every night. Dreams are most vivid during REM or rapid eye movement sleep.

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7. *The older you get, the fewer hours of sleep you need.*

False. Sleep need remains unchanged throughout adulthood. Older people may wake more frequently through the night and may sleep less, but their sleep need is no less than during young adulthood. When older people sleep less at night, they tend to sleep more during the day. Sleep difficulties are not a normal part of aging, although they are all too common. If poor sleep habits, pain or health conditions make sleeping difficult, a physician can help.

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8. *Most people don't know when they are sleepy.*

True. Most people don't know when they're sleepy. Researchers have asked thousands of people over the years if they're sleepy, only to be told no...just before the individuals fell asleep! What does this mean? Many people don't know if they are sleepy, when they are sleepy, or why they are sleepy. When driving, don't think you can tough it out if you're sleepy but only a few miles from your destination. If you're sleepy enough, you can fall asleep...anywhere.

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9. *Raising the volume of your radio will help you stay awake while driving.*

False. If you're having trouble staying awake while driving, the only short-term solution is to pull over at a safe place and take a short nap or have a caffeinated drink. Doing both - for example, drinking coffee, then napping before the caffeine kicks in - may be even better. However, the only long-term solution is prevention...starting out well rested after a good night's sleep. Research shows that loud radios, like chewing gum and open windows, fail to keep sleepy drivers alert.

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10. *Sleep disorders are mainly due to worry or psychological problems.*

False. Stress is the number one reason people report insomnia (difficulty falling or staying asleep). However, stress accounts for only a fraction of the people who suffer either chronic insomnia or difficulty staying alert during the day. Sleep disorders have a variety of causes. Sleep apnea, for example, is caused by an obstruction of the airway during sleep. Narcolepsy, which is characterized by severe daytime sleepiness and sudden sleep attacks, appears to be genetic. No

one knows yet what causes restless legs syndrome, in which creepy, crawly feelings arise in the legs and are relieved, momentarily, by motion.

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11. *The human body never adjusts to night shift work.*

True. All living things (people, animals, even plants) have a circadian or about 24-hour rhythm. This affects when we feel sleepy and alert. Light and dark cycles set these circadian rhythms. When you travel across time zones, your circadian rhythm adjusts when the light and dark cycle changes. For shift workers, the light and dark cycle doesn't change. Therefore, a shift worker's circadian rhythm never adjusts. Whether you work the night shift or not, you are most likely to feel sleepy between midnight and six a.m. And no matter how many years one works a night shift, sleeping during the day remains difficult. Shift workers should avoid caffeine during the last half of their workdays, block out noise and light at bedtime, and stay away from alcohol and alerting activities before going to sleep.

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12. *Most sleep disorders go away even without treatment.*

False. Unfortunately, many people who suffer from sleep disorders don't realize that they have a disorder or that it can be treated. But sleep disorders don't disappear without treatment. Treatment may be behavioral (for example, going to sleep and waking at the same time every day, scheduling naps or losing weight), pharmacological (involving medication), surgical or a combination. Untreated sleep disorders may have serious negative effects, worsening quality of life, school and work performance, and relationships. Worse, untreated sleep disorders may lead to accidents and death.